REZONING APPLICATION
FOR

1222 PATRICK HENRY
PLANNED RESIDENTIAL DEVELOPMENT
Blacksburg, Virginia

AUGUST 1, 2018
Revised DECEMBER 3, 2018

PREPARED FOR:
GREEN VALLEY BUILDERS
1520 N. Main Street, Suite 201
Blacksburg, VA 24060

PREPARED BY:
BALZER & ASSOCIATES, INC.
448 Peppers Ferry Road, NW
Christiansburg, VA 24073

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PROFFER STATEMENT FOR THE APPLICATION OF
GREEN VALLEY BUILDERS
Dated: December 3, 2018

Pursuant to Virginia Code § 15.2-2298 and Blacksburg Zoning Ordinance § 1160, GREEN VALLEY BUILDERS, the owner(s) of the property that is the subject of this Application (Tax Parcel #196-A 5) state that this property will be developed in accordance with the following voluntarily proffered conditions.

1. The property shall be developed in substantial conformance, as determined by the Zoning Administrator, with the submitted rezoning application entitled 1222 Patrick Henry Planned Residential Development (the "Application") dated August 1, 2018 and revised December 3, 2018.

2. The building shall be either Earthcraft Multi-Family Certified or National Green Building Standard Certified.

3. An evergreen buffer shall be planted along the northern property line. Evergreen trees shall be a minimum of 12' height at the time of planting.

4. An 8' privacy fence shall be installed along the northern property line.

5. Applicant will construct a 4'x8' covered bus shelter and a bus pull-off lane along Patrick Henry Drive.

6. The Owner will be responsible for making all upgrades to the downstream gravity sanitary sewer line that are (i) determined by the Department of Engineering and GIS, in its reasonable judgment, to be specifically attributable to the 1222 Patrick Henry Dr redevelopment and (ii) necessary to provide sufficient sewer capacity for the approved redevelopment. These improvements must be performed and accepted by the Town before any certificate of occupancy is issued for any development approved by this rezoning. All required upgrades to the downstream gravity sanitary sewer line shall be performed by owner at its sole expense unless the Town of Blacksburg and the owner agree in writing to more substantial improvements to the downstream gravity sanitary sewer line that are beyond the scope of this proffer. The Owner acknowledges that part or all of any required upgrades may be performed by the Town if sufficient funding is appropriated by the Town Council for the North Main Gravity Sewer Replacement Capital Improvement Project (with plans dated September 7th, 2016) and that the actual timing of any such Town upgrades is not determined at this point.

The undersigned hereby warrants that all of the owners of a legal interest in the subject property have signed this proffer statement, that they have full authority to bind the property to these conditions, that the proffers contained in this statement are not "unreasonable" as that term is defined by Virginia Code § 15.2-2303.4, and that the proffers are entered into voluntarily. In the attached Exhibit A the owner has explained the following:

a) How each proffered condition addresses an impact specifically attributable to the proposed new residential development; and/or
b) Whether there are any offsite proffers and how they benefit the project.

Should any provision of this proffer statement be determined to be invalid by a court of competent jurisdiction, that determination shall not affect the validity of the remainder of the provisions in this document.

GREEN VALLEY BUILDERS

By: _____

Printed Name: Justin Boyle

Title: CFO

STATE OF Virginia
COUNTY OF Montgomery

Acknowledged before me this 3 day of December, 2018.

_____

Notary Public

My Commission Expires: 3/31/21
Registration No.: 367042

LINDSEY M. GILMER
NOTARY PUBLIC
REG. #367042
MY COMMISSION EXPIRES
3/31/21
COMMONWEALTH OF VIRGINIA

PROFFER STATEMENT FOR THE APPLICATION OF
GREEN VALLEY BUILDERS
Dated: November 30, 2018

EXHIBIT A

Proffer #1: The masterplan and accompanying rezoning documents contain the details of the application. This proffer provides assurance to the Applicant and the Town that the project will be developed in accordance with these documents.

Proffer #2: This proffer addresses the Town of Blacksburg's sustainability goals and limits the long term environmental impact of new construction

Proffer #3: To offset potential impacts of additional noise and light pollution and to provide additional screening for the project and building, the 12' tall evergreen plantings will provide immediate relief to the residents of the Shenandoah neighborhood.

Proffer #4: With an increased number of residents on site, concern has been expressed by the Shenandoah neighborhood about trespassing on their property. The privacy fence not only provides additional light and noise reduction, it also prevents people from cutting through the Town property and the Shenandoah neighborhood.

Proffer #5: With an increased number of residents on site, it is expected that the number of people utilizing the transit service will increase. Providing a bus shelter at this location will promote use of the stop.

Proffer #6: With an increased number of residents on site, it is expected that the sanitary sewer flows will increase. Improvements to the downstream sanitary sewer system would allow for the increased sewer flows to be maintained within the gravity pipe system as required by Town Code.

I. Land Use Plan

Proposed Development

This application is for the rezoning of Tax Map number 196-A 5 from R-5 to a Planned Residential District as amended by Ordinance 1863 adopted by the Town of Blacksburg on April 25, 2018. The site is bordered by Patrick Henry Drive, the Blacksburg Rescue Squad, Hunters Ridge Apartments, and the Town of Blacksburg Shenandoah Open Space and Multi-Use Trail. The Shenandoah subdivision is also located near the property and just north of the Town of Blacksburg Open Space property. The master plan proposes a student housing development in order to provide additional student housing in an area that is already a popular rental destination for the student population and has been identified by the Town as a preferred corridor for additional student housing density. The developers are committed to creating a unique, attractive and sustainable community. The Comprehensive Plan, the Residential Infill Guidelines, the proposed Future Land Use designation, and the surrounding properties were all taken into consideration while designing the site layout and architectural features.

II. Preliminary Layout

Zoning

The proposed rezoning request is for approximately 4.215 acres located on the northern side of Patrick Henry Drive. The property currently holds a vacant, dilapidated single-family home and is zoned R-5. The application proposes a Planned Residential District that will allow for a multi-family building.

Master Plan

The Master Plan of the proposed development is shown on Sheet Z3 in the Appendix. The Master Plan graphically designates the location for the building, parking lot and access points into the site. It also shows proposed locations for bike parking, amenities, utilities, stormwater management areas, open spaces, and sidewalks. Further grading and site engineering may require minor repositioning or relocation of identified elements, such as sidewalks, to accommodate level access and provide required ADA access. Specific design elements of the project are discussed in more detail in the following portions of this application. The project's direct correlation to guiding principles of the Town of Blacksburg Comprehensive Plan is discussed in Section VI entitled Design Principles and Concepts.

Project Description and Structures

The project proposes one building with three (3) stories. As currently designed, the building is proposed to have 215 bedrooms in 75 units. The total number of units and the unit mix may change as plans are finalized, but the maximum number of residential units will be no greater than 18 units per acre (75 units) and the maximum bedroom count will be no greater than 51 beds per acre (215 beds). There will be a mix of 1, 2, and 4-bedroom units but the majority will be 2-bedroom units. The bedroom breakdown shown on the attached plans is as follows:

- (9) 1-bedroom units (12% of unit mix)
- (29) 2-bedroom units (39% of unit mix)
- (37) 4-bedroom units (49% of unit mix)

The building will include a fitness center, designated mail pickup area, clubhouse and lounge area, multiple study rooms, a weather protected outdoor bike parking area and an outdoor amenity area. A detailed description of the proposed amenities is included in the following section. Other amenities may be added as the design is finalized.

III. Site Development regulations

Permitted Uses

The following uses are permitted by right within the planned residential district:

Residential

Home Occupation
Multi-family Dwelling

Miscellaneous

Accessory Structures

Height, Lot Setback, Coverage Ratios & Residential Density

Setbacks: The front and rear setbacks shall be thirty (30) feet and the side setbacks shall be fifteen (15) feet.

Maximum Building Height: 41'

Lot Coverage: The maximum lot coverage for the site will be 75%.

Floor Area Ratio: The maximum floor area ratio (FAR) for the site will be 0.60.

Residential Density: The maximum residential density will be 51 bedrooms per acre.

Comparison to existing R-5 Zoning Requirements

Zoning Requirement	R-5 District	1222 Patrick Henry PRD
Maximum Density:	20 bedrooms per acre	51 bedrooms per acre
Setback: Front	35'	30'
Side	10'	15'
Rear	25'	30'
Maximum Height:	35-45'	41'
Maximum Lot Coverage:	55%	75%
Maximum FAR	0.35	0.60

Occupancy

The proposed Planned Residential District shall have a maximum occupancy requirement for the multi-family units as stated in Section 3113 of the Blacksburg Zoning Ordinance. For the apartments, the maximum dwelling unit occupancy shall be a family, plus two (2) persons unrelated to the family; or no more than four (4) unrelated persons.

Minimum Open Space

As required by the PRD district, a minimum of twenty-percent (20%) of the total project area shall be designated as open space. Of that 20%, a minimum of five thousand (5,000) square feet shall be provided for active or passive recreational activities. As currently shown on the masterplan, there is approximately 22% open space provided and 22,996 square feet of recreational area. The final open space area may vary slightly during the full site design process but shall not drop below the prescribed 20% minimum. The amenities shown as open space that allow for recreational activities are:

- Building Amenities
  - Clubhouse with Lounge
  - Fitness Center
  - Multiple Study Areas

- Outdoor Amenity Area
  - Pool
  - Fire Pit
  - Open Lawn
  - Hammocks
  - Grills and Tables
  - Weather protected Bicycle Parking

The proposed open space plan is shown on Sheet Z4. Other possible uses may be added to the open space area as the design develops.

Parking

General

Parking will be provided in a surface lot on three sides of the building. There will be a mix of standard spaces (9' x 18'), compact spaces (8' x 16'), and handicapped spaces. The proposed parking lot layout is shown on Sheet Z3. A total of 221 spaces, or 1.03 spaces per bedroom, is proposed. A detailed breakdown of the proposed parking is below. The development will also use a parking pass policy to ensure compliance with the proposed parking regulations.

PRD Zoning Area – Minimum Parking Required

The parking requirements are as follows:

Multi-Unit Residential: This development is proposing a ratio of 1.03 spaces per bedroom on the masterplans. This is slightly lower than the standard town requirement of 1.1 spaces per bedroom, however it is typical for this type of

development that not all residents will keep a car onsite. Many residents will walk, bike, or take advantage of the multiple nearby Blacksburg Transit stops. A new Blacksburg Transit bus stop and covered shelter are being proposed for the site development. Therefore, the lower ratio should still be sufficient to provide parking for residents and guests.

The following parking ratios are proposed with this project:

Standard Parking:	149 spaces
Compact Spaces:	65 spaces (29.4% of total)
ADA Parking:	7 spaces
Total Spaces:	221 spaces (1.03 spaces/bedroom)

Bicycle Parking

The development shall provide bicycle parking at a minimum ratio of 30% of the provided bedrooms for residential units (65 bicycles). Along the north side of the property between the building and the parking lot there will be a large bike parking area. This area will be covered, and weather protected so residents and guests can feel comfortable leaving their bicycles in a safe area not exposed to the elements. There will also be standard outdoor bicycle parking spread around the development. Residents will also be allowed to store their bicycles in their unit.

Electric Charging Stations

One electric car charging station will be located within the project. The exact location of the charging station will be determined during the site plan stage. Electric infrastructure may be configured to allow for future additional charging stations should the demand increase over time. This policy will further the concepts and ideals of the Town of Blacksburg sustainability design principles.

Project Phasing

Because this project encompasses only one building, it will be built in a single phase. All buildings, parking, onsite and offsite infrastructure, and any road improvements that will be required for the development will be constructed within this single phase.

Subdividing & Parcels

The site currently exists as a single parcel and no future subdivision is proposed. Any open space or other applicable easements will be dedicated on a final approved plat for the project as required by the Town of Blacksburg Zoning and Subdivision Ordinances. Utilities serving the parcels shall be designed to meet Town of Blacksburg Water and Sewer Standards.

Landscaping

Landscaping will be provided as specified in the Town of Blacksburg Zoning Ordinance to include the required interior parking lot landscaping/greenspace areas, the overall site greenspace and the canopy coverage landscaping requirements for multi-family uses. Existing vegetation internal to the site or

adjacent to outside parcel boundary lines may be preserved as grading allows and may count towards the requirements above if such vegetation is consistent the intent. In addition to these requirements, the applicant is proffering to provide an additional evergreen buffer along the northern property line and portions of the western and eastern property lines. This buffer would be planted with evergreen trees which would be a minimum of 12' in height at the time of planting. The applicant is also agreeing to plant a greater than required standard for the street tree planting along Patrick Henry Drive. This upgraded streetscape would include 1 Street Tree per 30' of road frontage, 1 Understory Tree per 30' of road frontage, and 10 shrubs per 50' of road frontage.

Site Lighting

Site lighting will be provided as specified in the Town of Blacksburg Zoning Ordinance and in the spirit of the Town's dark sky initiative. This will include the installation of parking lot lighting to provide night time visibility for residents as well as any other site specific and/or exterior building lighting while minimizing the impact to adjacent properties. While the Town zoning ordinance allows lighting in residential districts up to 20' in height, the project is proposing no light poles over 15' in height. Other site-specific lighting features could include but not be limited to sidewalk lighting and landscaping/accent lighting. Any exterior lighting fixtures located on the proposed buildings will also be designed in the overall photometric plan to ensure compliance.

Maintenance

Overall maintenance of the property will be under the development's ownership and through the owner's designated on-site property management agent. The property will have one fulltime office/leasing employee and one fulltime maintenance employee onsite during normal business hours. There will also be a 24 hour on call maintenance and emergency contact. One part-time employee is also planned to assist in onsite matters as determined by the owners. All common space elements including exterior elements such sidewalks, parking lots, and recreational areas will be under the development's ownership and will be maintained at no cost to the general taxpayer.

Building Design and Construction

This planned residential development embraces the growing Blacksburg community. The design celebrates the connection we have with the natural surroundings of the New River Valley through honest simple materials and transparent architecture. Capturing views of sugar maples and the area's rippled landscape backdrop while the interior and exterior amenity spaces support an active lifestyle. With easy access to local transportation, secure bike storage and numerous places to study and collaborate, this residential project provides a strong support and connection for the Town of Blacksburg and Virginia Tech, furthering the development of the Patrick Henry corridor with a long lasting creative project.

There will be four (4) different floor plans offered in the proposed building:

- 1 bedroom/1 bathroom
- 2 bedroom/2 bathroom

- 4 bedroom/4 bathroom
- 4 bedroom/4 bathroom corner unit

This project is being designed by looking into the future as the housing needs of the Town will change over the years. While there is currently a high demand for additional student housing, this project design will function for multiple tenant types as that demand changes. The high percentage of one and two bedroom units, attests to that as those units are more appealing to young couples, graduate students and young professionals. By keeping this in mind during the design process, the units, amenities, and transportation options can all be set to accommodate an everchanging landscape of residents. Each unit will feature a kitchen, a washer and dryer, a centrally located living room, and a private bathroom for each bedroom. Accessible amenity spaces and elevator access also allows for a mix of age and mobility ranges in tenants. Flexible spaces for studying and collaboration will be provided along with recreational activities that can be used and appreciated by a wide range of tenants. The outdoor amenity space will be designed in such a way as to promote a sense of community among the residents.

Healthy lifestyles and community living are encouraged by the outdoor amenity space, fitness center, and clubhouse. Multiple Blacksburg Transit stops exist near the development and a new stop is proposed directly in front of the site. The community will also provide ample bicycle storage, which will be covered and weather protected, to encourage residents to use alternative methods of transportation.

Entrance Identification Signs

Two monument signs are currently proposed for the project – one at each entrance location. Each sign will be designed with materials similar to the building. A rendering of the signs with dimensions are included in the appendix. A detailed design will be submitted during the site planning phase in order to obtain a sign permit prior to installation. The applicant may choose to install only one sign at the site planning phase if they so desire. Other directional signage may exist onsite and will meet the directional signage standards of the Town ordinance for multi-family dwellings.

IV. Public Utilities

All utilities will be constructed to Town standards, and where appropriate, be dedicated to the Town. Public utility easements will be dedicated along water distribution and sewer collection lines outside of the road right-of-way.

Water

According to discussions with Town staff, there is adequate water capacity for this project and the town will be able to provide the required 20 psi at the meter. However, the water pressure and flow is relatively low in this area due to the elevation, so a pump may be required to get the required water pressure to the upper floors of the proposed building. The final determination of this will be handled at the site plan stage with the project consultants and Town Staff.

The proposed rezoning area is bordered on the southern side by Patrick Henry Drive, on the western side by the Blacksburg Rescue Squad, on the northern side by the Shenandoah subdivision and on the eastern side by Hunters Ridge Apartments. According to town maps and a field survey, there is an existing 8" water main on Patrick Henry Drive and an existing fire hydrant next to the western entrance that will remain. The proposed development will install a new 8" water main on the site. The approximate total length of the new watermain will be 968 feet. Fire lines and service connections will be installed throughout the property to serve the proposed building. Fire hydrants will be located within the project as necessary per Town Code requirements. Preliminary hydrant locations are shown on the master plan, but these may change as the design is finalized. The proposed waterline size also may change based on final design criteria.

Sanitary Sewer

According to town maps and a field survey, there is an existing 8" sanitary sewer gravity main behind the property which drains to the Shenandoah #1 pump station in the Shenandoah subdivision. The project proposes to install a new manhole in the existing line located in the Town property north of the site and connect a new 8" sewer main to service the proposed building. The town, in reviewing the available capacity along the proposed sewer shed of this project, has noted that capacity issues do appear to exist along certain sections of the sewer line and that additional capacity issues may occur as a result of the proposed development. The Town Engineering Department is currently working with their third party consultant to review the flows in this section of line and looking at an alternative connection point for this project. If it is determined that a capacity issue will occur that is directly attributable to the proposed development, the applicant is prepared to remedy that issue based on good engineering practice and as agreed to by the Town of Blacksburg Engineering Department.

All proposed main lines will be located within easements and will be constructed per Town Code. The preliminary utility layout is shown on Sheet Z3.

Based on Town of Blacksburg Standards and Virginia Department of Health Standards, an average daily flow is estimated for the proposed uses below.

AVERAGE DAILY FLOW

1. Student Housing: 215 total bedrooms
   Design Assumptions and Calculations:
   Water and Sewer usage for residential use is 100 gal/day per bedroom = 21,500 gal/day

2. Amenity Areas
   Design Assumptions and Calculations:
   Amenity Area = 1,000 gal/day per area
   Total Water/Sewer Usage By Amenity Area = 1,000 gal/day

3. Length of new sewer pipe +/- 398' x 1.5 gpd/ft infiltration factor = 597 gal/day

TOTAL ESTIMATED WATER USAGE BY PROPOSED DEVELOPMENT = 22,500 gallons per day

TOTAL ESTIMATED SEWER USAGE BY PROPOSED DEVELOPMENT = 23,097 gallons per day

As the project is planned to be either Earthcraft Multi-Family Certified or National Green Building Standard Certified, water usage reductions are a critical piece of those certifications. Low flow fixtures will be required for this project. According to Viridiant (formerly EarthCraft Virginia), the water usage for an EarthCraft certified project is estimated at 39.6 gallons/occupant/day. This is drastically lower than the 100 gallons/bedroom/day shown above. Using the Viridiant information, the flows would be:

TOTAL ESTIMATED WATER USAGE BY PROPOSED DEVELOPMENT = 9,514 gallons per day

TOTAL ESTIMATED SEWER USAGE BY PROPOSED DEVELOPMENT = 10,111 gallons per day

Applicant will construct or cause to be constructed at no expense to the Town all water/sewer mains and appurtenances on the Property and will connect the water/sewer mains to publicly owned water/sewer mains. All water mains and sewer mains will be constructed to the standards of the Town, will comply with the regulations and standards of the Town and will comply with the regulations and standards of all other applicable regulatory authorities. All water mains and appurtenances and sewer mains will be dedicated to public use unless otherwise directed by the Town of Blacksburg. Any water mains and appurtenances and/or sewer mains that must be relocated as part of the development will be relocated by the applicant at no cost to the Town.

Water Quality & Stormwater Management Standards

The project site is a 4.215 acres parcel and the proposed development includes a adding a pulloff lane for Blacksburg Transit, bringing the total area of disturbance to 4.60 acres. The site is bound by the Patrick Henry Drive to the south, the Blacksburg Rescue Square to the west, the Shenandoah subdivision to the north, and Hunters Ridge Apartments to the east. Currently, there is an existing house on the site. There are no wetlands or jurisdictional waters present on site. There are currently no stormwater management BMPs serving the site. Approximately half of the site drains to the northwest corner, through an existing town-owned bioswale and under Progress Street towards Tom's Creek. The other half of the site flows through a pipe under Patrick Henry Drive to a town-owned stormwater pond, which then flows towards the Duck Pond and Stroubles Creek. Surrounding areas consist of developed urban land including commercial uses, multi-family residential, and single family residential.

Stormwater Management

A Stormwater Concept Plan and Narrative has been submitted with the application that addresses the Town and State stormwater quantity and quality requirements.

Pre-Development Summary

In the pre-development condition, the site is split into two distinct drainage areas. Runoff from Drainage Area #1 (approximately 8.00 acres total, with 1.98 acres coming from the project site) drains in a northwesterly direction towards the rear of the property, where it flows through an existing bioswale and under Progress Street by way of a 36" culvert. This culvert outfalls to a natural channel. From this point, runoff continues through a series of channels to Tom's Creek. Point of Analysis #1 has been set at the outfall of the 36" culvert.

Runoff from Drainage Area #2 (approximately 9.34 acres, with 2.24 acres coming from the project site) flows towards Patrick Henry Drive, where it is captured by curb inlets in the right of way and then carried across the street and into an existing detention pond. From this pond, flows continue through a combination of manmade and natural channels to the Duck Pond. Point of Analysis #2 has been set in the storm sewer on the southern side of Patrick Henry Drive.

Post-Development Summary

In the post development condition, the site will remain separated into two drainage areas. Two underground stormwater detention systems (one for each area) have been incorporated to manage and control runoff. Both systems have been designed to manage peak flows and meet all applicable water quantity requirements.

The proposed underground system for Drainage Area #1 is located on the far western side of the site in the parking area. A small amount of drainage from the right of way will be rerouted to flow through the onsite system. The system will outfall at the rear of the site and runoff will flow through the existing bioswale. The proposed underground stormwater system for Drainage Area #2 is located on the eastern side of the site, in the greenspace in front of the building. A small amount of offsite drainage will also be rerouted through this system. The system will outfall to a new manhole (labeled as "MH-A" on the stormwater concept plan), which will replace an existing curb inlet ("EX-1"). The curb inlet will need to be replaced due to the addition of the bus pull off lane.

Water Quality

Water quality compliance has been achieved through use of the Virginia Runoff Reduction Method in accordance with the design criteria set forth in 9VAC25-870-65 and through the purchase of nutrient credits in accordance with the criteria set forth in the Code of Virginia. Per §62.1-44.15:35 (C)(2), the VSMP shall allow the use of nutrient credits when less than five acres of land will be disturbed, or the phosphorus water quality reduction requirement is less than 10 pounds per year. The proposed development is within the thresholds for permitted use of credits,

with a disturbance area of approximately 4.60 acres and a required phosphorus load reduction of 5.19 lb/yr.

The existing site[1] is a single-family lot with a house and shed located on it. The pre-development site has an impervious land cover of 0.31 acres (6.67%). The post development site has an impervious land cover of 3.08 acres (67%), resulting in a composite runoff coefficient (R_v) of 0.71. The prescribed phosphorus pollutant reduction requirement is 5.19 lb/yr, which will be handled by purchasing credits. Please see attached calculation sheets.

Channel Protection

In accordance with 9VAC25-870-66 (B), concentrated stormwater flows have been discharged directly to a stormwater conveyance system. The portion of the site[2] that discharges to Point of Analysis #1 outfalls to an existing bioswale and then travels through a series of natural conveyance systems to its 1% analysis point (approximately 233 acres). The portion of the site that discharges to Point of Analysis #2 outfalls to a manhole and travels first through a series storm pipes to an existing pond, then through a series of natural channels to its 1% analysis point (approximately 229 acres). Both drainage areas have met the requirements of channel protection per 9VAC25-870-66(B)(3) as shown below:

R_v Calculation – DA #1

Pre-developed = 0.069 acre*ft – See HydroCAD "RV Calculation" Report
Developed = 0.296 acre*ft – See HydroCAD "RV Calculation" Report

$Q_{Developed} \leq I.F. \times (Q_{Pre\text{-}developed} \times RV_{Pre\text{-}Developed}) \; / \; RV_{Developed}$

$Q_{Developed} \leq 0.8 \times (Q_{Pre\text{-}developed} \times 0.069) \; / \; 0.296$

$Q_{Developed} \leq 0.19 \times Q_{Pre\text{-}developed}$

The resulting maximum allowable peak flow rate for the one-year 24-hour storm at Point of Analysis #1 is 3.42 cfs and the actual post-development peak flow achieved is 3.42 cfs.

R_v Calculation – DA #2

Pre-developed = 0.110 acre*ft – See HydroCAD "RV Calculation" Report
Developed = 0.275 acre*ft – See HydroCAD "RV Calculation" Report

$Q_{Developed} \leq I.F. \times (Q_{Pre\text{-}developed} \times RV_{Pre\text{-}Developed}) \; / \; RV_{Developed}$

$Q_{Developed} \leq 0.8 \times (Q_{Pre\text{-}developed} \times 0.110) \; / \; 0.275$

$Q_{Developed} \leq 0.32 \times Q_{Pre\text{-}developed}$

The resulting maximum allowable peak flow rate for the one-year 24-hour storm at Point of Analysis #2 is 13.81 cfs and the actual post-development peak flow rate achieved is 13.79 cfs.

[1] In the context of water quality compliance, "site" shall be defined as the land or water area where the land-disturbing activity is physically conducted (the area of land disturbance, 4.60 acres), including the limits of any off-site land disturbance. See Sheets SW3-SW4.

[2] In the context of channel and flood protection, "site" shall be defined as the land or water area where the land-disturbing activity is physically conducted (the area of land disturbance, approx. 4.60 acres), including the limits of any off-site land disturbance. See Sheets SW3-SW4.

Flood Protection

In accordance with 9VAC25-870-66 (C), concentrated stormwater flows have been discharged directly to a stormwater conveyance system.

For Drainage Area #1, the flow is discharged to an existing bioswale and is then carried through a natural stormwater conveyance system. This system carries flows to a point where the contributing drainage area is less than or equal to 1.0% of the total watershed area as defined in subdivision 3(a) of the regulations (at least 227 acres).

For Drainage Area #2, the flow is discharged to an existing manhole, then carried through a series of storm pipes to an existing pond. Once the flow exits the pond, it is carried through a natural conveyance system to a point where the contributing drainage area is less than or equal to 1.0% of the total watershed area as defined in subdivision 3(a) of the regulations (at least 229 acres).

As shown in the HydroCAD calculations, the point of discharge for each drainage area releases a post-development peak flow rate for the 10-year 24-hour storm event that is less than the pre-development peak flow rate from the 10-year 24-hour storm event, satisfying subdivision 2(b). Per subdivision (3), no further analysis of the downstream stormwater conveyance system is required.

Downstream

Runoff from Drainage Area #1 is discharged to an existing bioswale and is then carried through a natural conveyance system towards its 1% analysis point. Runoff from Drainage Area #2 is discharged directly to a manmade stormwater conveyance system and is then carried through a series of storm pipes to an existing pond. Once runoff leaves the pond, it enters a natural conveyance system and is carried through a combination of manmade and natural conveyance systems towards its 1% analysis point. The post development peak runoff rate for each drainage area has been mitigated through the use of BMP's to prevent adverse impacts to downstream properties in the form of channel erosion, flooding, or increased pollutant loads.

Per 9VAC25-870-66 subsection A, compliance with Minimum Standard 19 of the Virginia Erosion and Sediment Control Regulations has been satisfied by meeting the requirements of the for channel protection and flood protection as shown in the Post Development Summary. No adverse impacts to downstream properties are expected as a result of this development.

Alternative Stormwater Management Plan

We have shown with the above calculations that stormwater runoff can be managed through the use of underground detention facilities on site and that all town and state requirements are able to be met. However, we plan to explore an alternative option prior to submitting for site plan approval. Instead of installing two systems on site, we will look at the possibility of taking all stormwater runoff offsite to an existing town-owned stormwater detention pond located at the southern end of the Collegiate Suites community. A field survey of the existing pond will be completed and all existing storm pipes currently draining to the pond will be analyzed. If it is

determined that this is a practical and affordable option, we will submit a full analysis and design plan showing any improvements needed for the pond and existing storm sewer system.

Environmental Impacts & Concerns

There are currently no known specific environmental issues or concerns on the subject property. However, industry standard due diligence must be performed prior to the start of construction to determine if there were any previous environmental concerns such as underground storage tanks. The property will also be investigated to determine if there are any jurisdictional waters on the property such as streams or wetlands. If any evidence is found and prior to any development, the property would have to be delineated, confirmed by the US Army Corps of Engineers, and all appropriate permits filed, and mitigation provided as necessary. During construction it will also be necessary to provide all required erosion and sediment control measures along the stream to avoid any sediment and silt from reaching the stream.

Trash Pick-up

There will be two (2) locations within the parking lot for trash and recycling disposal. Both locations will be adequately screened from the adjacent properties. The development will have a private refuse collection company handling removal. All recycling shall meet the Town of Blacksburg recycling guidelines and regulations for Multi-family dwellings.

Other Utilities

Utility connections such as power, phone, cable television, gas, and any other miscellaneous utilities serving this community shall be located underground. Some relocation of existing utilities may be necessary. Coordination with AEP and the other private utility companies will be required.

V. Traffic Circulation Pattern

Public Roads, Access Drives and Vehicular Traffic

There are two points of access into the property as currently proposed. There will be one entrance located on either side of the building and the drive aisle will loop through the site. The two driveways will be approximately 450 feet apart. All drive aisles and parking spaces will be designed to meet Town standards. Both entrances are designed as full access intersections. Traffic counts and turning movement counts of existing traffic patterns have been completed as instructed by Town Staff for analysis as part of this design.

By completing the Town of Blacksburg VDOT Traffic Impact Analysis (TIA) Supplemental Application, it has been determined that a VDOT TIA is not warranted with this project. However, through conversations and meetings with the Town Engineering Director it was agreed that a private traffic analysis be completed for this project due to the anticipated number of new trips and potential impact on Town roads. All traffic count locations and signal analysis locations were agreed

upon between the Town and Applicant prior to starting the analysis. These details are included in the Traffic Analysis submitted with the rezoning documents.

Balzer and Associates has performed the traffic analysis and generated the proposed daily trip totals for the new development. The trip generation numbers for the existing and proposed uses are shown below for the AM Peak, PM Peak and Weekday totals, in order to show the anticipated increase in traffic due to the higher bed count of the project. Signal analysis and turn lane analysis was done under several scenarios including: existing conditions 2018, background condition 2020, and buildout condition 2020.

The following text and tables are excerpts taken from the completed traffic analysis by Balzer and Associates, dated 11/20/2018 and submitted with this application:

Trip generation for this study was based on the concept plan created by Balzer and Associates, Inc. (please see Appendix B) and information provided by the developer regarding the expected uses of the property. The policies and procedures found in the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 10th Edition*, were employed to determine the potential site generated traffic volumes for the proposed development in the AM and PM peak hours.

For the off-campus student apartment use, trips were based on the total number of bedrooms. The projected trips were calculated using the equations and directional splits provided in the ITE Manual for student apartments over ½ mile from campus. The equations and directional splits are listed below:

Time Period:	Equation:	% Entering / % Exiting:
Weekday	T = 4.09(X) – 78.98	50% Enter / 50% Exit
AM Peak Hr of Adj. Traffic	T = 0.15(X) + 10.64	28% Enter / 72% Exit
PM Peak Hr of Adj. Traffic	T = 0.31(X) – 1.81	52% Enter / 48% Exit

			Trip Generation						
Land Use			AM Peak Hour			PM Peak Hour			Weekday
Proposed Development	ITE Code	Independent Variable	Enter	Exit	Total	Enter	Exit	Total	Total
Off Campus Student Apartments	225	215 Bedrooms	12	31	43	34	321	65	800

Table 4: Site-Generated Traffic

Based on knowledge of the area, it is anticipated that there will be significant usage of alternate means of transportation by residents of this development, including walking, bicycling, and bus via the Blacksburg Transit (BT). The BT is a particularly heavily used form of transportation, especially for trips to and from the Virginia Tech campus.

Based on discussions with the Town of Blacksburg, a 20% reduction has been applied to account for bus, pedestrian, and bicycle trips. Table 5 shows the site-generated trips with the 20% reduction.

			Trip Generation						
Land Use			AM Peak Hour			PM Peak Hour			Weekday
Proposed Development	ITE Code	Independent Variable	Enter	Exit	Total	Enter	Exit	Total	Total
Off Campus Student Apartments - Proposed	225	215 Bedrooms	10	24	34	27	25	52	640

Table 5: Site-Generated Traffic (With 20% Reduction)

Conclusions

Based on the data collected, the assumptions made, and the potential site generated traffic, the results of the analysis are:

- the proposed project will increase traffic at the existing intersections and on the surrounding road network;
- traffic volume increases at the existing intersections will not significantly impact level of service or delay at the existing intersections;
- the existing intersections operates at an acceptable LOS with the projected background traffic volumes and will continue to do so with the site-generated traffic volumes included;
- no signal timing modifications are recommended at the existing intersections;
- no right or left turn lanes or tapers are warranted at either of the full access entrances to the site.

Additional study was performed to analyze any potential impact the western most entrance could have on the Rescue Squad entrance. The traffic model was updated to include the western site entrance to model the turning movements into and out of this entrance and determine anticipated queue lengths for the left turn into this entrance. The models are for the AM and PM peak hours because they are the two busiest traffic hours of the day. The software reports average queue length, 95th percentile queue length (queue will be shorter than this 95% of the time during the peak hour), and maximum queue length. Twelve different simulations were performed by the software and the results are below. For reference, there is approximately 110' between our entrance and the rescue squad entrance, which is the length of 5-6 vehicles.

AM Peak Hour

Average queue = 1 ft (round up to 1 vehicle)
95th % queue = 11 ft (round up to 1 vehicle)
Max. queue = 17 ft (round up to 1 vehicles)

PM Peak Hour

Average queue = 3 ft (round up to 1 vehicle)
95th % queue = 22 ft (round up to 2 vehicles)
Max. queue = 48 ft (round up to 3 vehicles)

Blacksburg Transit

The project is located on Patrick Henry Drive near multiple existing Blacksburg Transit stops, with the closest being approximately 825' away on Senaca Drive. A new transit stop, with a designated pulloff lane, is proposed directly in front of the site. Blacksburg Transit was consulted on this project prior to the submittal and agreed that a new pull off in this location was desired. They also indicated that the proposed stop location and one directly across Patrick Henry Drive have been contemplated as a BT project and were already in the works conceptually. As is the case of all student housing properties along the Patrick Henry corridor, it is anticipated that there will be heavy bus ridership from this new project. This further cuts down on future vehicular trips in the corridor and reduces the need for some residents to have a vehicle onsite at all.

Pedestrian Walks

A sidewalk will be provided around the building to provide access to the parking area. A meandering trail will connect the outdoor amenity area to the building and the parking lot. In addition, there will be a sidewalk connection to the public sidewalk/multi-use trail along Patrick Henry Drive, with stairs and ramps provided for accessibility as necessary. A pedestrian trail connection is also proposed at the rear of the parking lot area to connect to the existing Shenandoah Trail system. Any sidewalks will that will serve as accessible routes will meet ADA requirements. The proposed sidewalk network is shown on Sheet Z3.

VI. Design Principles and Concepts

Zoning, Existing Land Use and Comprehensive Plan Vision

The property is currently zoned R-5 – Transitional Residential. It is located in an area classified as an A3 Multi-Unit Residential Neighborhood on Map C in the Comprehensive Plan. A-3 areas are defined as neighborhoods that are "primarily apartment developments rented to students due to the proximity of the Virginia Tech campus." Fewer lifestyle conflicts are expected in these areas due to the fact that they are larger properties where all the residents have similar lifestyle expectations. The following is a list of applicable issues for A-3 neighborhoods outlined in the Comprehensive Plan. These issues have been considered in the design of this redevelopment.

- Transit service in these areas should continue to meet resident's needs
- Enhancing sidewalk, trail, and bicycle opportunities that link these areas of high concentrations of people with Downtown and the University core campus will be beneficial
- New developments and redevelopments should:
    - Consider providing open areas and recreational opportunities within their developments
    - Provide strong property management and maintenance
- Through education of residents, owners, and property managers, as well as the Town's zoning enforcement property maintenance programs, seek to minimize lifestyle conflicts that may occur at the interface of these higher density developments with adjacent residential neighbors

- New multi-family developments in these areas should de-emphasize parking areas, maximize the use of alternate transportation options, be walkable, connect to other developments, have a street presence, and use other principles as detailed in the Residential Infill Guidelines

The site is currently designated as Medium Density Residential in the Town's Comprehensive Plan Future Land Use Map. This Future Land Use is defined as having up to ten dwelling units per acre, or up to 20 bedrooms per acre. The typical implementing zoning districts for this use are R-5, OTR, PRD, and PMH. The property is surrounded primarily by High Density PRD zoning, with some RM-48 zoning nearby as well. There are also several properties in the surrounding areas that appear to have current densities above their future landuse designations. Hunters Ridge, for example, which is still a very viable and well maintained property has been estimated at approximately 55 bedrooms per acre.

The Housing portion of the Comprehensive Plan specifically details the challenges that exist in the Blacksburg housing market with respect to undergraduate students. Enrollment at Virginia Tech is expected to increase significantly over the next few years. However, the availability of on-campus housing has not increased at nearly the same rate as enrollment and it is expected that this will be an ongoing problem. The result is that undergraduate students have begun infiltrating traditional neighborhoods, creating lifestyle conflicts between the students and families or other non-student residents. Issues that can arise from off-campus student housing being provided in traditional neighborhoods include poor property maintenance, absentee landlords, and over-occupancy. Therefore, it is easy to understand the need for student housing options that won't have a negative impact on traditional neighborhoods.

This area of town is currently home to multiple apartment complexes which are primarily rented to either undergraduate or graduate students. Existing complexes near the project site include Terrace View, Hunter's Ridge, Pheasant Run, Shenandoah condominiums, Collegiate Park, and University Terrace. This is an ideal location for student housing given the proximity to campus, retail opportunities, and existing bus routes. The site is currently zoned R-5 for single family residential, however rezoning for a multi-unit residential use is a good option for this location because it is surrounded on three sides by either commercial or high density multi-unit residential uses. There is a single family residential neighborhood behind the site, however it is separated from the project site by a large town-owned open space. The developer has met with the Shenandoah Neighborhood prior to the rezoning submittal and outside of the Town rezoning process. This was to understand their concerns early in the process and be able to address them with the initial application material and before the Town required neighborhood meeting. Several items are noted later in this application text concerning the specific design criteria utilized to minimize impact to the Shenandoah neighborhood.

The developers have attempted to create a community that is unique and will enhance the visual aesthetics of Patrick Henry Drive. The Residential Infill

Development Guidelines listed in the Comprehensive Plan were considered in the design of this project and the following criteria have been met:

- **Building Orientation:** The building will address Patrick Henry Drive.
- **Setback:** Surrounding buildings have existing setbacks varying from 40' to 96'. The proposed building will have varying setback points, measuring between 30' and 80' off of Patrick Henry and between 90' and 110' from the rear property line.
- **Building Frontage/Entries:** A plaza will be located in front of the building, creating a decorative streetscape. Due to the difference in elevation between the street and the building, retaining walls, stairs and ramps will be required and will be incorporated into the streetscape design. All parking will be located behind the front building line.
- **Off-street Parking:** Parking will be located on the sides and rear of the building in order to not dominate the streetscape.
- **Screening/Landscaping:** Existing vegetation may remain as grading allows to provide a natural buffer on the northern and eastern property lines. Additional evergreen screening landscaping and an 8' privacy fence will be provided along the northern property line (against the Town open space), on a portion of the western property line (against the rescue squad building) and on a portion of the eastern property line (against Hunters Ridge) to provide screening for the residents of this project. Parking lot landscaping will be provided as required by town code. The streetscape along Patrick Henry Drive will be landscaped at a greater density than required by Town Code.
- **Open Space:** A minimum of 20% open space will be provided with several options for recreational space for the residents, including a pool, grills, outdoor seating, a fitness center and a clubhouse with lounge.
- **Walkways:** There will be a sidewalk all the way around the building to provide access to the parking area. There will also be a stair/ramp connection to the public sidewalk along Patrick Henry Drive and a trail connection to the Shenandoah Trail system.
- **Scale and Massing:** The existing apartment buildings near the site, such as Hunters Ridge and Collegiate Suites, are primarily 3-story buildings. However, with the gable roof structure on those buildings, they vary in height from 40-45'. The proposed building is also a 3-story building but has a flat roof structure. The estimated height of the proposed building from the main floor to the highest point is 41'. This height is actually within the allowable R5 zoning district heights, with additional setbacks, which this building is providing. The building height will be consistent with other structures on Patrick Henry Drive but will not be so large as to overshadow the neighboring properties.

  It is also important to recognize that the building is greater than 89' from the property line at it's closest point and approximately 188' from the closest single family property in the Shenandoah

neighborhood. In a by-right development scenario, a 45' tall structure could be as close as 35' to the property line.

- **Architectural Features & Character and Content:** The selected building materials will create a contemporary look while still complementing the surrounding area.
- **Streetscape:** A streetscape will be created with a plaza and landscaping.
- **Sidewalks:** Sidewalks will be provided throughout the project, creating a safe and accessible site for residents**.**
- **Crosswalks:** Entry points will be striped for crosswalks to provide protection for pedestrians and bicyclists.
- **Bicycle Facilities:** Multiple bicycle facilities will be provided within the project to encourage biking.

The elements that directly conform to the issues and principles stated in the **Town of Blacksburg 2046 Comprehensive Plan** are listed below and reference the Policy Chapter as updated October 11, 2016. The italicized text is from the Comprehensive Plan, while the regular text is the how the proposal meets these guidelines.

COMMUNITY CHARACTER PRINCIPLES
Objectives & Policies

CCP 1. ***Well-designed pedestrian and bicycle friendly routes and facilities are essential to the Town's identity as a walkable and bikeable community.*** *Pedestrian circulation systems are required to be constructed in all new developments. Connections to the existing Paths to the Future routes should be made where possible through new development or Town programs.*

The proposed development will provide internal sidewalks as well as connections to the public multi-use trail along Patrick Henry Drive.

CCP 2. ***Lifestyle conflicts are inherent in a college town, where neighborhoods may have a mix of students and non-students.*** *Students moving into established neighborhoods may have different expectations than neighbors with regard to noise, upkeep, parking, and occupancy. Property management, education and code enforcement can mitigate some of these conflicts. This is an important issue for residents.*

The proposed development is within an area that is primarily made up of student housing complexes. The site is adjacent to one traditional neighborhood in the rear, but a large open space and existing vegetation will provide a natural buffer. The developer has met with neighborhood prior to rezoning submittal and has worked very hard with the designer and the neighborhood to come up with solutions to concerns that have been voiced. Some of these are: no balconies on building, large building setback from Shenandoah, a large evergreen buffer and an 8' Privacy Fence on the back and partial sides of the property, enclosed hallways, site amenities oriented away from neighborhood, shorter and less bright site lighting than the Town Rescue Squad facility and Hunters Ridge, and coordinated with transit to add a pull off stop to encourage less car traffic.

CCP 6. ***Creation of public and private parks and recreation amenities is an important part of land use development decisions.*** *A variety of gathering spaces should be available to citizens throughout the Town. Recreation areas should be thoughtfully designed to meet the needs of the development, neighborhood or broader community.*

There will be multiple recreation opportunities within the development, including both outdoor and indoor amenity areas. These areas will provide a place for residents to gather and promote a sense of community.

CCP 14. ***Transit connections and bus stop facilities are important components to support transit as a viable transportation option in Town. These elements should be part of the design of new developments and be coordinated with Blacksburg Transit regarding service availability.***

A new Blacksburg Transit stop with a dedicated pull off lane and covered bus shelter is proposed in front of the proposed development.

CCP 15. ***Blacksburg is a responsible headwaters community for Southwest Virginia.*** *Developments within the Town should minimize short and long-term impacts on surface waters (streams and ponds), groundwater, karst features, and wetlands.*

The submitted stormwater management plan demonstrates that runoff from the proposed development will be handled from a quality and quantity standpoint and will not have negative impacts downstream.

CCP 16. ***Responsible site design and development practices will minimize environmental impacts within the Town.*** *Any residential, commercial, industrial, or agricultural development or redevelopment should meet and exceed federal, state, or local regulations to minimize impacts of soil erosion, stormwater run-off, and non-point source pollution.*

The submitted stormwater management plan demonstrates that runoff from the proposed development will be handled from a quality and quantity standpoint and will not have negative impacts downstream.

CCP 18. ***Minimize light pollution, balancing dark skies with a safe pedestrian and vehicular experience at night.*** *The design and placement of new lighting for buildings, parking areas, or streets should have minimum impact of light spillover and glare on surrounding uses with special attention given to lighting when transitioning from higher intensity to lower intensity uses. Lighting should be the minimum necessary to have a safe environment.*

There will be parking lot lighting and site lighting provided for the safety of the residents, however it will be designed in such a way as to minimize or eliminate any light pollution on adjacent properties. It is also proffered that the light poles will be a maximum of 15' in height, which is 5' lower than the town requirement of 20' maximum.

CCP 19. ***For safety, appearance, and maintenance reasons, new developments are required to place utilities underground.*** *Where feasible and financially possible*

through developer contribution, Town subsidization, or other financial sources, existing above-ground utilities should be relocated underground.
New and relocated utilities shall be located underground as dictated by the zoning ordinance.

LAND USE
Objectives and Policies

LU.6. Consider the compatibility of development with surrounding uses. Utilize strategies such as landscaping or other buffering techniques along with modification of site design to minimize impacts and facilitate compatibility.
The majority of the adjacent properties consist of student housing complexes similar to what is proposed. Streetscaping will be provided to separate the community from the street. Existing and proposed vegetation will provide a buffer between the project site and the single-family neighborhood in the rear. The applicant is proposing 12' planted evergreen trees along the rear northern property line and portions of the eastern and western property lines. They are also proposing an 8' privacy fence along these areas.

LU.7. Encourage developers to work with surrounding property owners and tenants to resolve community concerns prior to formalizing development plans.
As stated above, the developers held a neighborhood meeting prior to this application submittal to discuss concerns and issues. Several of these concerns have been addressed in this application. They have also had one on one conversations with many of the neighbors in the Shenandoah neighborhood. Further meetings are anticipated throughout the rezoning process.

LU.19. Regulate the amount of noise and/or light produced by land uses to minimize impacts on nearby properties.
The development is adjacent to a single family residential neighborhood; however the outdoor amenity area will be placed in a courtyard on the opposite site of the building to prevent noise impacts on this neighborhood. A large wooded open space will separate the rear parking area from the lower density neighborhood. The applicant is also proposing to have an increased evergreen buffer along the Shenandoah Trail area and reduce onsite light pole heights to 15' which is 5' below maximum allowed by the Town Code.

LU.20. Protect the integrity and quality of water resources in the Town.
All federal, state and local stormwater quality and quantity requirements will be met with the project.

SUSTAINABLE COMMUNITY
Objectives and Policies

S3. As part of the development review process, consider how well the proposed application supports the Town's community commitment to sustainability.
The project is proffering to be certified as either an Earthcraft Multi Family or National Green Building Standard project. The proposed development will bring a larger population to this area, providing more potential opportunities for money to be spent at

the nearby restaurants and shops. The development will consider the environment by encouraging alternate modes of transportation. The courtyard area and clubhouse will promote a sense of community and provide a space for residents to gather.

ENVIRONMENT
Objectives and Policies

Natural Resources

EN.3. Conserve, protect, and manage networks and corridors of natural vegetation, forested areas, wildlife habitat, and undeveloped steep slopes.

The developer will leave portions of the existing forested buffer area undisturbed wherever possible.

Geologic Features: Karst & Steep Slopes

EN.21. Open space is the preferred land use in fragile terrain. As part of the development review process, the Town will:

- *Prohibit development on steep slopes exceeding 25%*
- *Restrict development on karst topography*

Neither of these conditions exist on this site.

Watershed Resources: Watersheds, Flooding Hazards, Stormwater, and Groundwater

EN.26. Open space is the preferred land use in fragile terrain. As part of the development review process, the Town will:

- *Prohibit development in wetlands*
- *Restrict development in riparian buffer zones*
- *Restrict development in Creek Valley Overlay*

The project is not located within a riparian buffer zone or in the Creek Valley Overlay district. There are no known wetlands on the site, however the property will be investigated to determine if there are any jurisdictional waters existing.

EN.27. Implement the BMPs required in the MS4 Program Plan.

All federal, state and local stormwater quality and quantity requirements will be met with the project.

Air Quality and Energy

EN.34. Support citizens in establishing and reaching vehicle travel reduction goals to reduce air pollution.

- *Walk, bike, and use public transit*

A new Blacksburg Transit stop will be added directly in front of the site to encourage residents to use public transportation and reduce vehicle use.

PARKS & RECREATION
Objectives and Policies

PR.3. Create an interconnected regional and local system of trails and walkways. Ensure that recreational facilities and programs are easily accessible by the Blacksburg Transit system, sidewalks, bike lanes, greenways and other pedestrian links.

A connection to the public sidewalk will be installed. This will provide access to the existing multi-use trail along Patrick Henry Drive and the Blacksburg Transit stop.

TRANSPORTATION
Objectives and Policies

Paths to the Future

T.1. Implement the Paths to the Future Map to create a cost-efficient infrastructure of multi-purpose trails that connect to residential areas, parks, schools, businesses, and other community amenities.

There are existing public routes along Patrick Henry Drive and behind the property. Community sidewalks will connect to both.

Sidewalks

T.10. Complete the construction of a connected sidewalk system:

• *Require the inclusion of sidewalks or multi-purpose trails in all new subdivisions.*

Sidewalks and a multi-use trail will be provided.

• *Ensure the sidewalk system is ADA accessible.*

Sidewalks will be accessible as permitted by topography and road grades and as required by the VHDA standards.

T.12. Maintain and improve the aesthetic quality of the pedestrian environment by planting street trees and other landscaping and installing street furniture where appropriate.

Additional landscaping above the town standards has been proposed with this project regarding street trees which will be planted along Patrick Henry Drive.

Transit

T.21. Enhance transit accessibility and convenience; lower parking demand, energy use, and air pollution by reducing traffic on local roads, and educate the community on the positive environmental impact from using public transit in order to encourage it overall use throughout the town.

There are currently multiple transit stops near the site, and a new stop and shelter will be added directly in front of the site.

T.27. During the development review process, ensure that transit service and access to/from the transit stop and the development are provided.

Blacksburg Transit has been consulted about adding a new stop and covered shelter in front of the site. A sidewalk connection will be provided from the site to the new stop, with ramps and handrails provided where necessary for accessibility.

Parking

T.49. The development review process ensures:

• *Surface parking facilities area landscaped and appropriately lighted.*

The parking lot will be heavily landscaped and lighted as required.

• *New parking lots minimize impacts on stormwater.*

Runoff from all new impervious areas will outfall the site at a rate equal to or less than the predevelopment rate for the 1-, 2-, and 10-year storms.

T.51 Promote alternative modes of transportation, including the development of a shuttle or trolley service between the commercial centers and outlying parking nodes and mixed-used areas.
Alternative modes of transportation will be promoted by a convenient Blacksburg Transit stop, ample bicycle parking, and connections to public sidewalks and trails.

UTILITIES
Objectives and Policies

Public Water System
U.5. Require new developments to utilize pipe design and construction of the water system in accordance with Town Code and development standards.
All new water and sewer systems proposed with this project will meet all Town development standards.

Solid Waste Management & Recycling
U.12. Promote and expand waste reduction, reuse, and recycling locally and regionally by citizens, government, and private businesses.
The community will provide containers for recyclable materials on site.

Electrical Services & Natural Gas
U.18. Regarding underground utilities:
• Require that new installations of utilities in developments be constructed underground.
All new utilities serving the development will be underground installation.

VII. Boundary and Legal Description

Boundary Map
The property included in the rezoning request is shown on Sheet Z1. The boundary map and the parcel description below are based on a compilation of maps of record. These metes and bounds do not represent those found by a current field survey of the property.

Legal Description

TAX MAP NUMBER 196-A 5
BEGINNING AT A POINT IN THE NORTHERN RIGHT OF WAY OF PATRICK HENRY DRIVE, SAID POINT BEING THE SOUTHWESTERN CORNER OF THE PROJECT SITE AND THE SOUTHEASTERN CORNER OF LANDS OWNED BY THE TOWN OF BLACKSBURG,

THENCE N22°00’54” A DISTANCE OF 321.05’;

THENCE N72°59’05”E A DISTANCE OF 542.15’;

THENCE S22°03’39”E A DISTANCE OF 388.79’ TO A POINT IN THE NORTHERN RIGHT OF WAY OF PATRICK HENRY DRIVE;

THENCE ALONG RIGHT OF WAY S87°17’36”W A DISTANCE OF 68.75’;

THENCE ALONG RIGHT OF WAY WITH A CURVE TURNING TO THE LEFT WITH AN ARC LENGTH OF 486.09’, A RADIUS OF 1672.02’, A CHORD BEARING OF S78°57’54”W, AND A CHORD LENGTH OF 484.38’ TO THE POINT OF BEGINNING;

THE AFORESAID PARCEL CONTAINS ±4.215 ACRES.

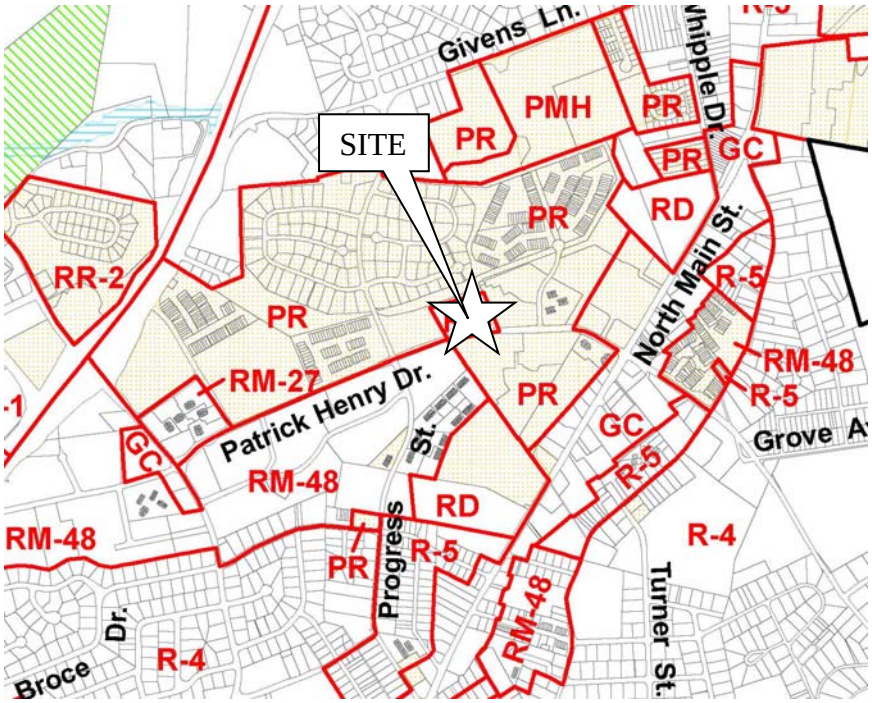
VII. Adjoining Landowners

Owners of land adjoining the site are shown in the following chart, listed by tax map parcel numbers with the name and mailing addresses:

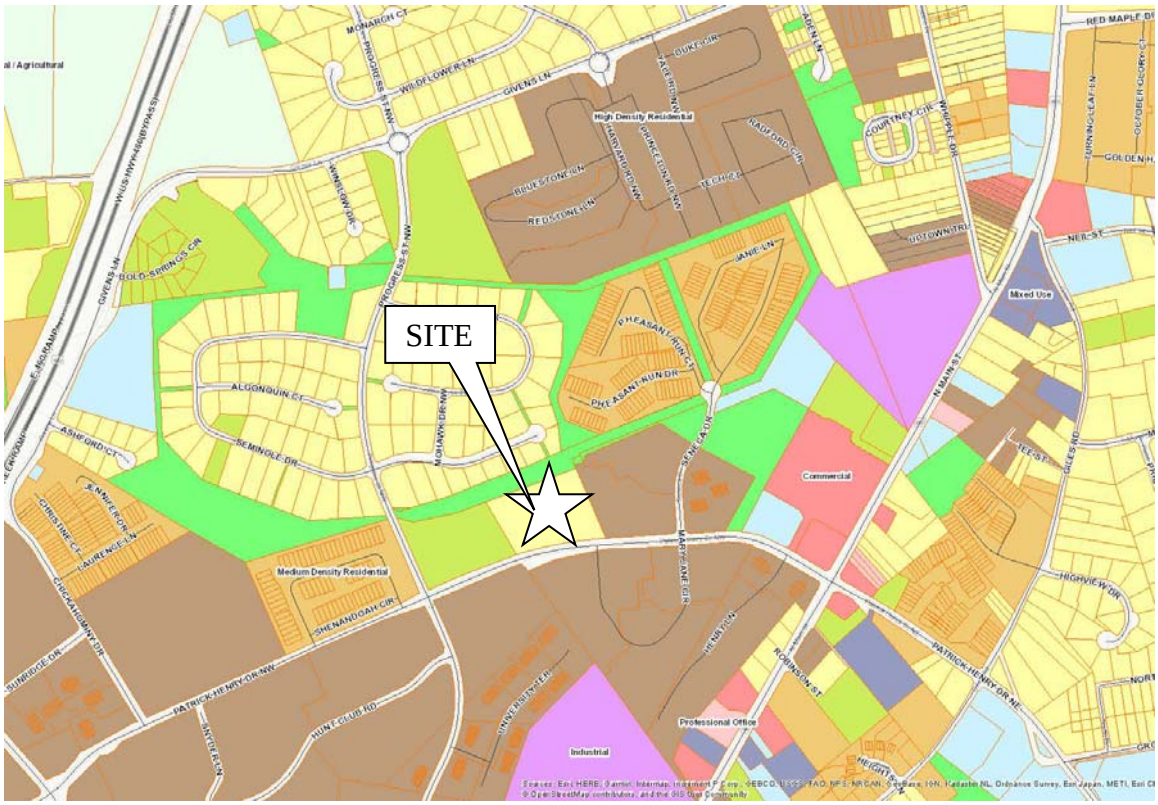
1222 PATRICK HENRY REZONING REQUEST Adjacent Property Owners		
Tax Parcel(s)	**Owner**	**Address**
196-A 33C 196-A 33E	TOWN OF BLACKSBURG	P.O. BOX 90003 BLACKSBURG, VA 24062
196-B 2 1	UNIVERSITY HOUSING CORP	2101 PARK AVENUE SUITE 403 VIRGINIA BEACH, VA 23451
196-10 2	CBS LLC II	2101 PARK AVENUE SUITE 403 VIRGINIA BEACH, VA 23451
196-A 9	CAP IX BLACKSBURG C/O RELIANT GROUP MANAGEMENT	601 CALIFORNIA STREET SUITE 1150 SAN FRANCISCO, CA 94108

Appendix

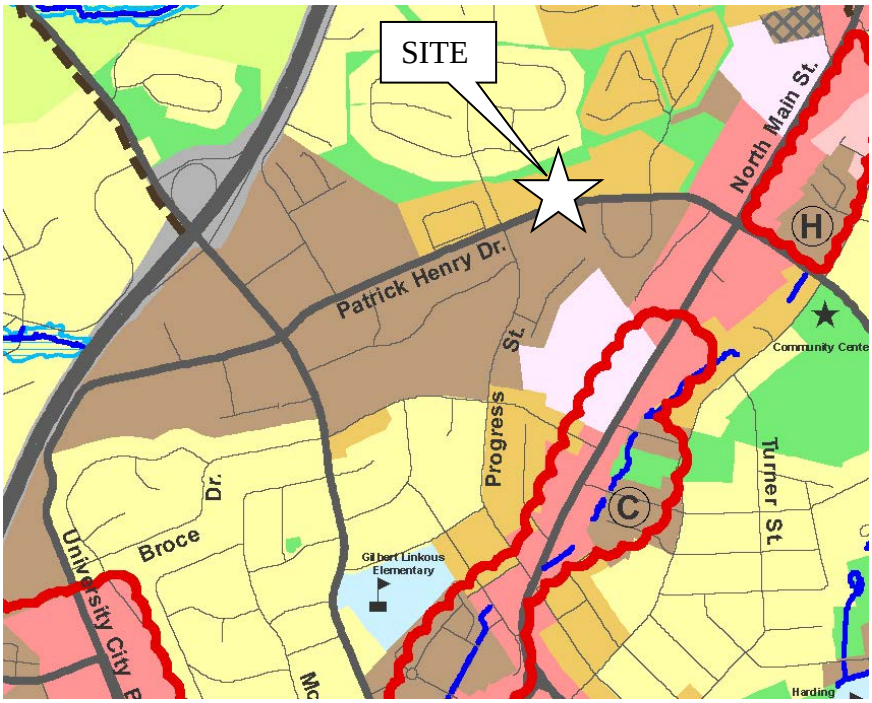
EXISTING ZONING MAP

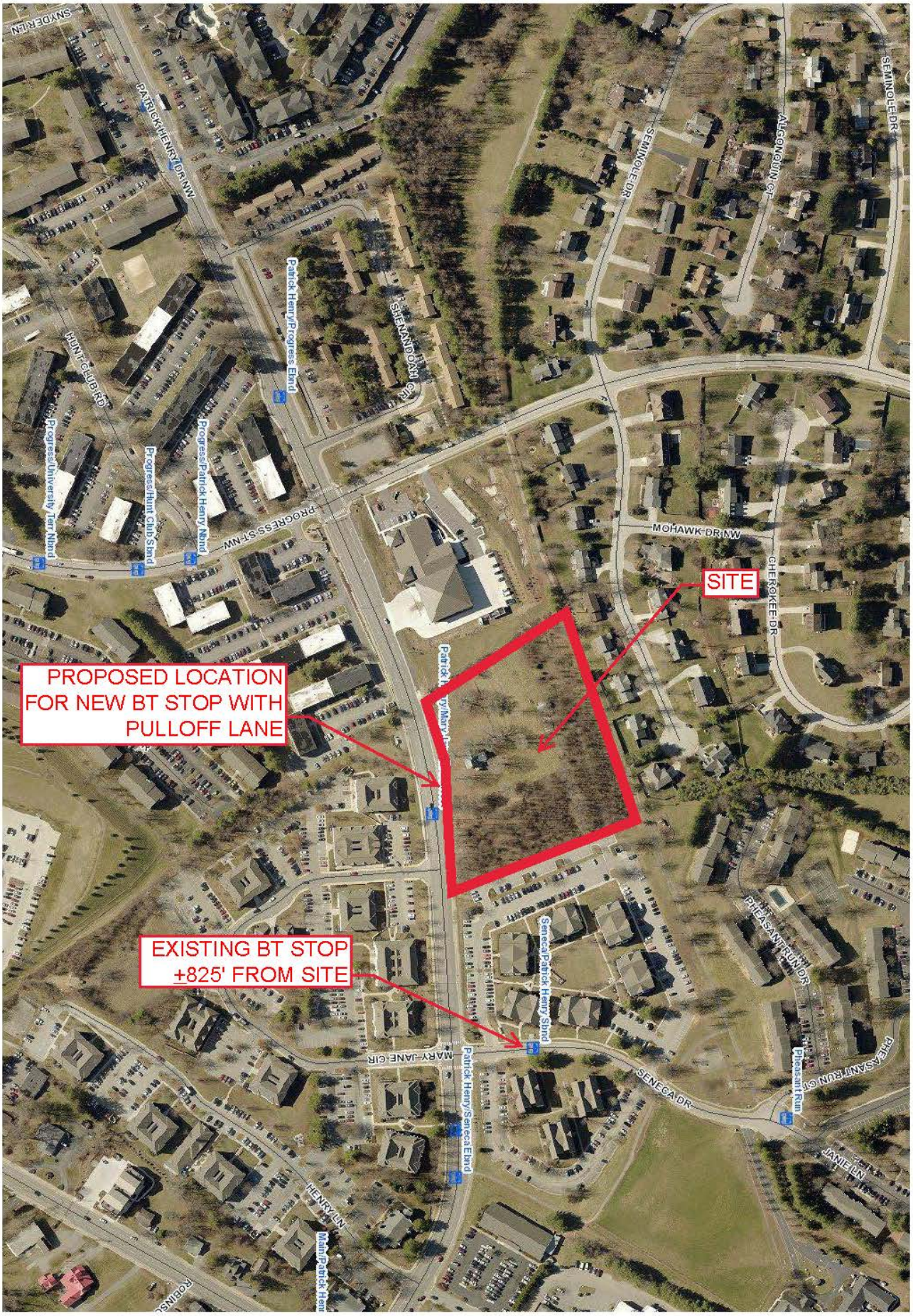


EXISTING LAND USE MAP



FUTURE LAND USE MAP




SITE
PROPOSED LOCATION FOR NEW BT STOP WITH PULLOFF LANE
EXISTING BT STOP ±825' FROM SITE
PATRICK HENRY DR NW
SEMINOLE DR
ALGONQUIN CT
SHENANDOAH CIR
HUNT CLUB RD
PROGRESS ST NW
MOHAWK DR NW
CHEROKEE DR
Patrick Henry/Progress Ebnd
Progress/University Terr Nbnd
Progress/Hunt Club Nbnd
Progress/Patrick Henry Nbnd
Patrick Henry/Seneca Sbnd
MARY JANE CIR
SENECA DR
PHEASANT RUN DR
Pheasant Run
JANIE LN
HENRY LN
Main/Patrick Henry